

Title (en)

BEARING APPARATUSES INCLUDING DUAL MATERIAL BEARING SURFACES

Title (de)

LAGERVORRICHTUNGEN MIT ZWEI MATERIALLAGERFLÄCHEN

Title (fr)

APPAREILS DE PALIER COMPRENANT DES SURFACES D'APPUI À DOUBLE MATÉRIAUX

Publication

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Application

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Abstract (en)

[origin: US2014254967A1] Embodiments of the invention relate to bearing apparatuses in which one bearing surface of the bearing apparatus includes diamond, while another bearing surface includes a non-diamond superhard material (e.g., silicon carbide). For example, a bearing apparatus may include a bearing stator assembly and a bearing rotor assembly. The bearing stator assembly and bearing rotor assembly each include a support ring and one or more superhard bearing elements generally opposed to one another. The bearing surface(s) of the rotor or stator may include diamond, while the bearing surface(s) of the other of the rotor or stator do not include diamond. Another bearing apparatus may include both thrust- and radial bearing components. The generally opposed thrust-bearing elements may include diamond, while the generally opposed radial bearing elements may not include diamond, but include a non-diamond superhard material, such as silicon carbide.

IPC 8 full level

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US 2017276171 A1 20170928; US 2020256379 A1 20200813; US 2023078021 A1 20230316; US 2024159268 A1 20240516;
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US 201514826121 A 20150813; US 201715618473 A 20170609; US 202016862159 A 20200429; US 202217890036 A 20220817;
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